Little Hoover Commission Testimony (topics requested by LHC) Robert L. Powell

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Solutions to speeding time to degree and increasing graduation rates;

As a public university, the University of California has outstanding graduation rates: 60% of UC freshmen graduate in 4 years, 83% graduate within 6 years and 80% of transfer students graduate within 4 years. Five UC campuses are in the top 20 state universities with the best graduation rates and three are in the top ten.

There are a few elements that are critical to graduation rates: 1. Staff advising; 2. Timely scheduling of classes, including summer, to avoid bottlenecks; 3. Careful attention to curricula.

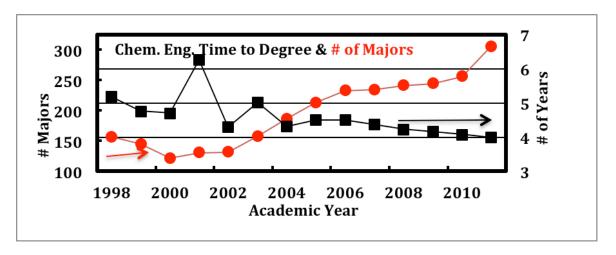
Example: The graph below shows the decrease in the time-to-degree for the chemical engineering degree at UC Davis from 1998 until . I chaired the department from 2002 until 2011. During that time we implemented several strategies to decrease time to degree including:

- 1. In 2004 we upgraded our student staff advisor position. This allowed us to hire people with a higher skill set. We also protected this position during budget cuts. The person holding this position meets with students on a regular basis to help them navigate the requirements for both their subject degree and also campus-wide requirements such as general education. These positions have been directly threatened by budget cuts in two ways. First, there has been an overall decrease in the numbers of staff student advisors. These are some of the first positions to be cut in academic units. Advisors may now be responsible for seeing over five hundred students and may spend less than 15 minutes a quarter with each one. Second, in many cases advising is being pulled away from academic departments which are closest to the students and moved to a higher organizational level in the name of efficiency essentially farther from the students and the faculty. In the long run this will have a negative impact on the environment that students experience and will not be the best way to deploy resources.
- 2. The faculty undertook a complete curriculum revision in 2003 that became effective in 2005. This resulted in the slight increase in time-to-degree. However, the goal of this was to modernize the curriculum and also streamline the prerequisites needed for courses. This did have a long term impact.
- **3.** In summer 2005, the department began offering a few very selective courses during the summer. These are senior laboratory courses which are extremely time consuming for the students and the instructors. At that time we were able to get a favorable arrangement that allowed the faculty member to teach her courses in the summer instead of during a regular quarter. Because the summer session essentially packs a 10

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week quarter into a 5 week session, the demands on the teaching assistants are higher. Working with summer sessions, we obtained additional TA support. This both modulated the workload and also ensured the safety of the laboratories. Every year, we have been told that our course will not go forward as a result of budget cuts. We have had to increase the size of our sections from 12 to 18 students. We have had the compensation provided to the department cut by 50%. We have struggled to keep the teaching assistant support at an appropriate level.

4. All of these changes resulted in a continual decrease in time-to-degree over a period when the enrollments increased by threefold. That is, we increased access, did all we could do to assure affordability and we revitalized the curriculum to reflect the latest knowledge.



• Faculty support for online education, including UC Online, MOOCs or other online educational models:

The University of California offers 2500 online courses that have enrolled 90,000 students. Many of these are offered through our University Extension. UC has offered170 online for-credit courses; at least 114 available on regular campus academic year or summer. The testimony from Professor Williams details the offerings of the systemwide UCOE. There are 4 online professional Masters' programs at 3 campuses. Faculty are participating in 18 MOOCs. UC Berkeley has a partnership with EdX, UC Irvine, and UCSF have partnerships with Coursera. Other campuses are investigating additional partnerships.

Significant investments in bandwidth, technical support, and other forms of infrastructure are needed. Some faculty describe having faster internet access at home than on campuses. As a result of our budget crisis, campuses have elected to reduce investments in IT. This often comes through eliminating support positions and consolidating whatever support remains farther away from academic programs.

To enable a qualitative leap in online course offerings, these infrastructure investments will need to be made in student housing as well as in classroom and laboratory spaces. Students who live off campus, will need to invest in services with sufficiently high bandwidth to accommodate large multimedia data streams. Adequate support personnel must be available on a 24/7 basis to fully make use of online education. Although faculty and teaching assistants cannot be available at all hours,

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there must be adequate technical support to ensure that students will not be hindered in their progress by non-academic problems.

How to ensure classes offered online are equal in quality to classroombased instruction;

The Academic Senate has insisted that intense and careful attention be paid to online course proposals to ensure quality consistent with UC. One concern has been that a means be provided to regularly refresh and update courses in order to incorporate new knowledge generated by research. This process must be the same for online courses as for traditional face to face courses. It is much easier to do this for face-to-face courses and have those courses evolve as the course material evolves. In some areas introductory courses undergo a 20-25% renewal annually. The format of the course must not inhibit our students from having the most up-to-date education possible.

The Academic Senate has implemented a rigorous review system. Every course is approved by a Senate committee on courses at the campus where it originates. Courses proposed to be offered systemwide are reviewed again by systemwide Academic Senate committee (University Committee on Educational Policy). The effectiveness of online courses at the systemwide level is being evaluated by a group from UCSB. The Academic Senate formed its own Blue Ribbon Panel of experts to analyze the UCSB evaluation.

It is also worthwhile to note that the Senate's efforts extend to students who are preparing to apply to UC. The Academic Senate's Board of Admissions and Relations with Schools (BOARS) has established an approval process for online a-g high school courses that are required for UC admission

• What mechanisms are in place for awarding credit to students who take an online class;

Senate Regulation 544 guarantees credit at all UC campuses for any course taken at any UC campus: "A UC student's home campus must permit a student in good standing to enroll simultaneously in courses offered by the home campus and in course(s) offered by another UC campus. Similarly, a UC student's home campus must also permit a student in good standing to enroll in summer courses offered by another UC campus."

Online courses are treated like any other UC course – once approved, unit credit is automatic. The student must ask his or her major department to approve the course as fulfillment of a specific requirement for the major.

Academic Departments determine which specific courses meet their major requirements. This is driven by course content. It is important that courses from another campuses appropriately articulate with those in the academic program in which the student is enrolled. Otherwise, mastery of the particular body of knowledge deemed necessary as a prerequisite to courses or required to graduate would not be ensured.

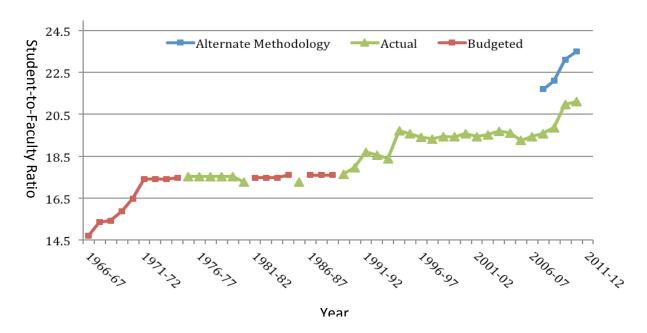
The Senate also has a regulation that allows a student to test out of a class - this can be used to get credit for a MOOC or any kind of self study: Regulation 474: Applicants may be given advanced standing in the University on the basis of certificates from other colleges and universities, upon the approval of the certificates by the Board of

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Admissions and Relations with Schools. The Board is empowered to adopt with regard to other collegiate institutions such working rules as may seem proper, to reject the certificates, in whole or in part, to defer the final granting of credit in advanced standing pending the completion, by the applicant, of satisfactory work in residence at the University, and to require examinations in any or all of the subjects offered. Applications for supplementary credit on the basis of work done before entering the University should be filed with the appropriate Admissions Officer at the time of application for admission.

Where UC can gain efficiencies and savings that help hold the line on tuition and fees, including increasing faculty teaching workloads and reducing administrative costs;

Large, cumulative cuts in state funding cannot be simply replaced by "efficiencies". Cuts have affected the quality of the educational experience as well as the overall academic experience of the students. One campus reports that the average class size for undergraduate lectures has increased by 14% from 65 to 74.3 students since 2007-08. Another that the student-faculty ratio has risen from 22:1 in 2008-09 to 24.78:1 in 2010-11, an increase of 13%. This has resulted in the average size of an undergraduate lower-division lecture class increasing 33%, from just over 66 in Fall 2008 to over 88 in Fall of 2011 and the size of the average upper-division lecture class has increasing 34%, from just over 55 in Fall 2008 to almost 74 in Fall 2011. Specifically, an introductory physics lecture has increased its enrollment from 95 in Fall 2008 to 573 in Fall 2011 and an introductory chemistry class has increased from 287 in Fall 2008 to 543 in Fall 2011.



More than 4,200 staff have been laid off and more than 9,500 positions have been eliminated or unfilled while workload has continued to increase due to higher levels of student enrollment, added regulations/oversight, etc. Student-to-faculty ratios have risen as many faculty lines are used to cover budget reductions and faculty take role

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in teaching as fewer temporary lecturers are hired. In the last two years, there have been more separations from the faculty than hiring. This is expected to continue as the faculty age (over 40% of our faculty are 55 or old whereas in 1990 under 30% of our faculty were over 55) and the increase of employee contributions to the retirement system make it increasingly financially attractive to retire. Over 180 programs have been eliminated or consolidated with others. Campus academic and administrative units were assigned cuts up to 35%.

The University of California currently enrolls approximately 10,500 California residents for whom the State has never provided workload funding. When recent budget cuts are taken into account, the University estimates it enrolls more than 24,000 unfunded California residents.

Other actions have been taken by faculty across the system have included reducing numbers of sections; reducing amount of written assignments; reducing offerings of electives.

It is important, even urgently so, to recognize that teaching is grounded in research, which is an equal portion of faculty workload/responsibility. Teaching is better when it reflects research. Teaching loads need to allow adequate time for research – and for faculty to revise courses to reflect the latest research. This is not a trivial task. By some estimates elementary courses in macroeconomics have been completely revised twice in the last thirty years.

Faculty favor administrative efficiency – but we need to be careful that one person's "efficiency" isn't just shifting a burden to someone else: faculty time spent doing administrative chores is not time well spent. This is a common issue with many of the new data systems that are being implemented. Faculty believe that it is possible to find administrative efficiencies but that it is difficult make headway in reducing the size of administration and its role in the daily life of faculty. One area that efficiencies have been evident is reducing energy usage. Here, savings on nearly every campus are being reported.

• Efforts to control health care and pension benefit costs;

UC has made changes in retirement & health plans that will limit cost increases in the future. UC employees are contributing to their retirement and the contribution rate will go to 6.5% of salary starting July 1, 2013.

UC has shifted some health benefit costs to employees in the form of higher co-pays. It is also decreasing the employer contributions to retiree health.

The impact of a performance-based funding model on the university and faculty;

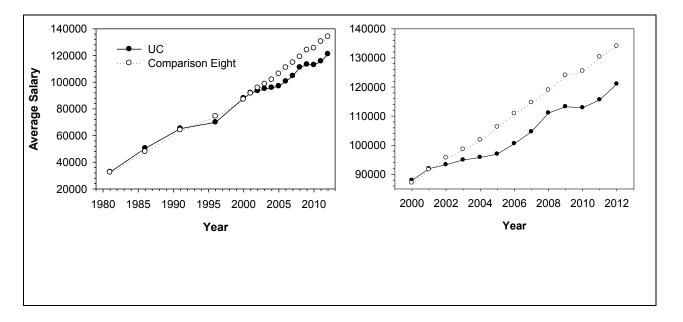
This is an issue that needs to be considered carefully. For example, in touting online education, the president of San Jose State recently said it could increase efficiency by 16%. The University of California has seen an increase in its teaching workload of over 16%. Indeed, in terms of the student-to-faculty ratio, the increase has been about 25%, eclipsing what is targeted for online education. Further, in the department example I gave above, nearly three times as many students are being taught and they are graduating in four years. The "efficiency" increase is hundreds of percent resulting

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from letting faculty and staff do what they do best rather than micromanaging from above.

Other solutions for addressing immediate and long-term financial issues concerning higher education;

Perhaps the largest saving that could be realized is to create a stable environment in which faculty and staff can work towards the goal of keeping UC the greatest public university in the world. Competitive salaries and a good work environment are absolutely needed, s shown below. Today, faculty must actively seek outside offers of employment to obtain competitive counter offers. This results in time being taken by faculty in the pursuit of extramural offers, administrators who deal with the faculty and the actual cost of the retention.



Staff suffer the same issues, although they may seek to move from one job to another within the university as the only means of obtaining a higher salary. As staff move, searches need to take place for their positions, which may go unfilled for months as the process unfolds. There is always a learning period when new staff are hired. This revolving door makes takes a lot of productive time away from employees.

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